

Serial No. 09/681,116

obvious to one of ordinary skill in the art. The examiner further states that Ancarani Restelli does not specifically disclose the actuating of the controller to enter the programming mode while the rider is actually riding the bicycle, however, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the apparatus of Ancarani Restelli in view of the teachings of Bellio to actuate the controller to enter a programming mode while the rider is actually riding the bicycle so as to accurately establish and store desired bicycle speeds. Applicant respectfully traverses this rejection.

Ancarani Restelli discloses an automatic bicycle shifting system that shifts between gears based upon predefined values stored in the memory of the computer. The predefined values are pre-selected before riding the bicycle, see specification at col. 3, lines 29-35. Bellio discloses an automatic bicycle shifting system having front and rear calibration modes for calibrating the positions of the front and rear derailleurs for each gear in order to compensate for the varying chain angle between the front chainrings and the rear sprockets as different gears are selected, see specification at col. 3, lines 37-42. Examiner states that Bellio does disclose setting the shift points for use in an automatic mode by referring to lines 45-50 of column 11 where a rider selects a "set switch" and the system reads sensor signals and stores information. Applicant respectfully disagrees with Examiner. In Bellio, the rider selects a "set switch" to set the positions of the front and rear derailleurs, not to select a shift point. When the set switch is activated, the system reads the position of the shift arms 12 and 10 and from position sensors 16 and 14 or the position of the cable grippers 410 from linear position sensors 424, the current cadence, and the current speed and stores this information in the memory of data processing unit 32, see specification at col. 11, lines 50-55. After exiting the calibration modes, the system calculates gear ratios for all gear positions that have been set into memory, using cadence and speed data stored during the calibration mode, see specification at col. 12, lines 3-6. The data stored during the calibration modes is used to calibrate front and rear gear

Serial No. 09/681,116


positions and to calculate gear ratios, not to set automatic shift points. The calibration modes of Bellio establish the actual gear ratios, not when to shift between those gear ratios. During the automatic mode of Bellio, the system is shifted between the gear ratios based upon a cadence limit. In contrast, the present invention discloses a shifting system having a setting mode during which the rider sets the speeds at which the bicycle transmission will shift between gears in a later automatic mode of operation. Therefore, the combination of Ancarani Restelli and Bellio fails to suggest or teach a shifting system that automatically shifts the bicycle transmission, while in the automatic mode, based upon wheel speeds that are set while riding the bicycle in a setting mode of operation as claimed in claims 1, 11, 17 and 24. For this reason, the rejection of claims 1, 11, 17 and 24 should be withdrawn.

Claims 2-10, 12-16, 18-23 and 25-32 were rejected as claims 1, 11, 17 and 24 under 35 U.S.C. 103(a). Since claims 2-10, 12-16, 18-23 and 25-32 depend directly or indirectly from and contain all limitations of one of the claims 1, 11, 17 and 24, they are felt to overcome the obviousness rejection in the same manner as claims 1, 11, 17 and 24.

This reply is believed to be fully responsive to the comments and suggestions of the Examiner and to place this application in condition for allowance. Favorable action is requested.

Respectfully submitted,

BRIAN JORDAN



Lisa J. Wunderlich, Attorney
Registration No. 40,307
SRAM Corporation
1333 N. Kingsbury, 4th Floor
Chicago, IL 60622
(312) 664-8800 ext. 1393